**Fig. 1**

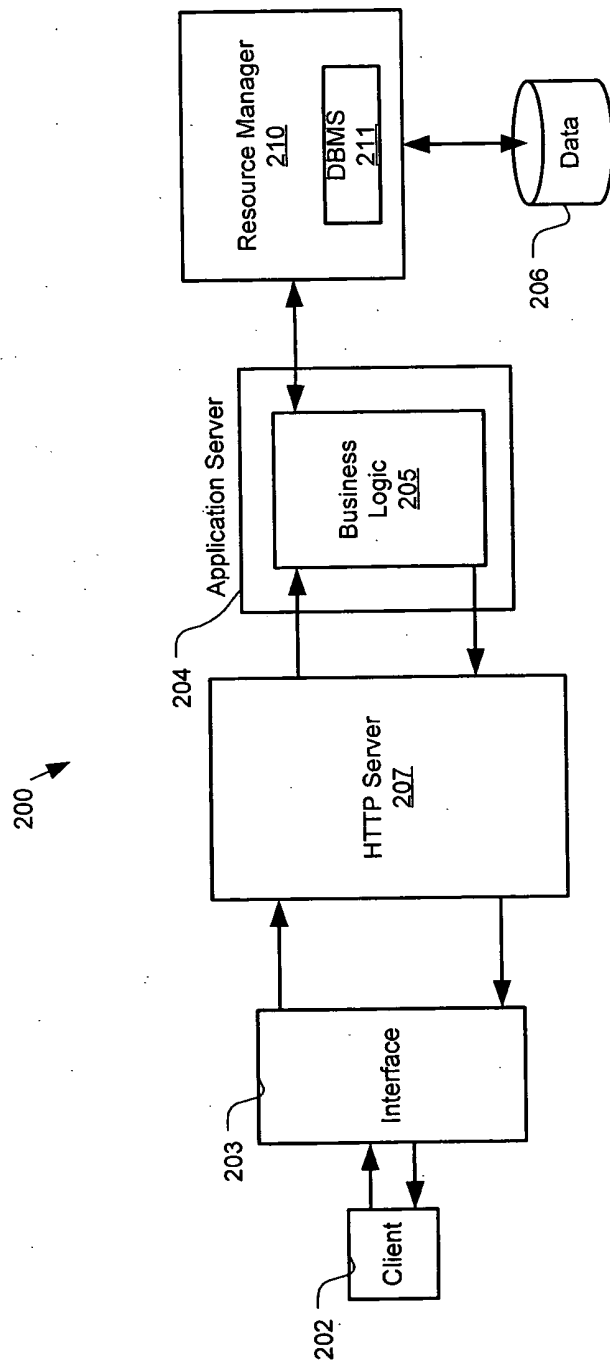**Fig. 2**

# Each Store Has Commerce Assets of Various Types


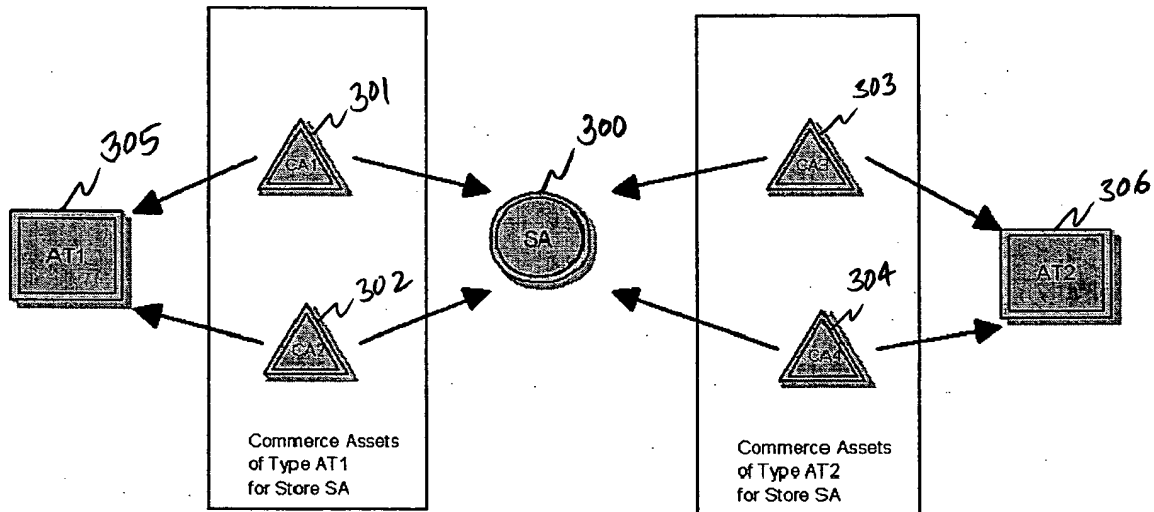
*fig. 2*

# Each Store Maps Asset Types to Store Relationship Types
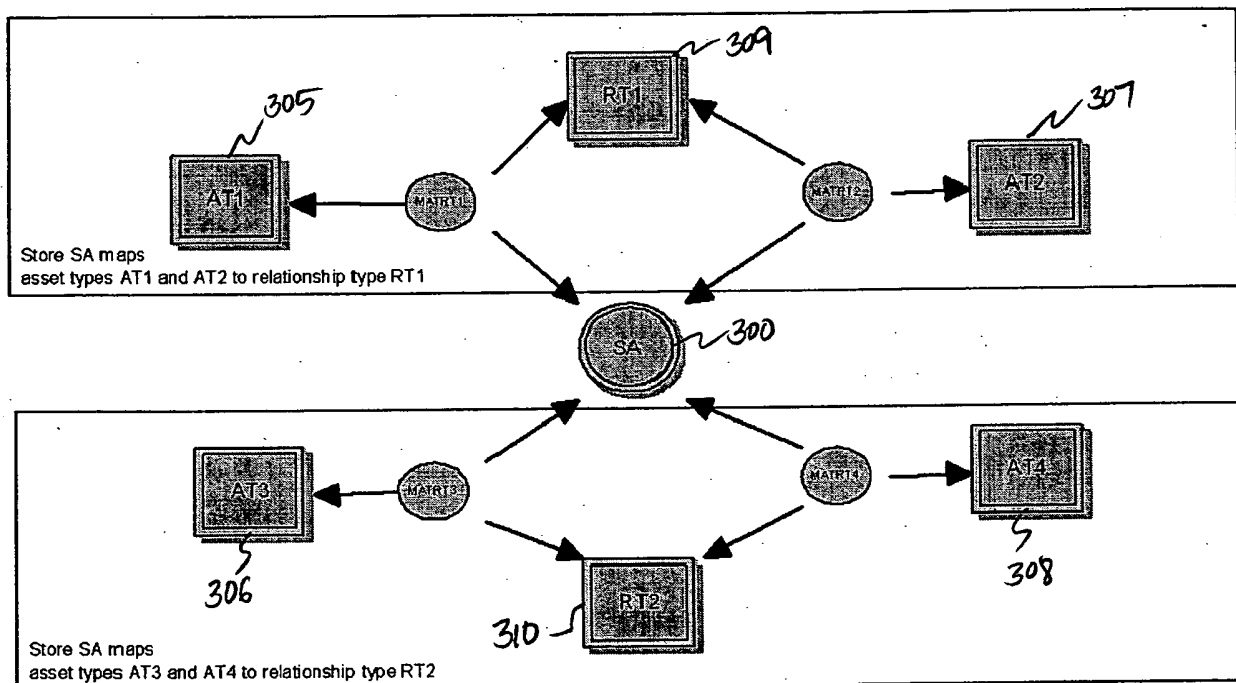


Store SA maps
asset types AT1 and AT2 to relationship type RT1

Store SA maps
asset types AT3 and AT4 to relationship type RT2

fig. 4

# A Storepath is a Sequence of Directed Relationships of a Particular Type Between Stores



SB1 ~321

DR1(S1) 331

RT1 ~309

SA 300

DR2(S2) 332

SB2 ~322

DR3(S3) 333

SB3 ~323

The storepath
of type RT1
for store SA
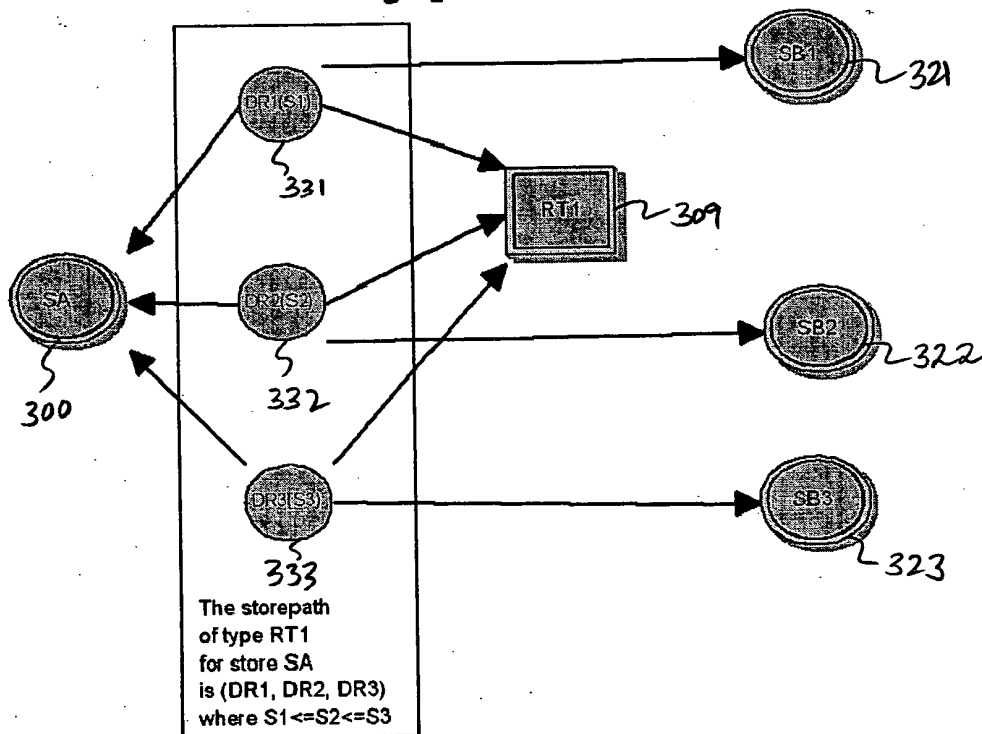is (DR1, DR2, DR3)
where S1<=S2<=S3

fig. 5

# A Store Locates Assets of a Particular Type by Searching the Stores on its Corresponding Storepath


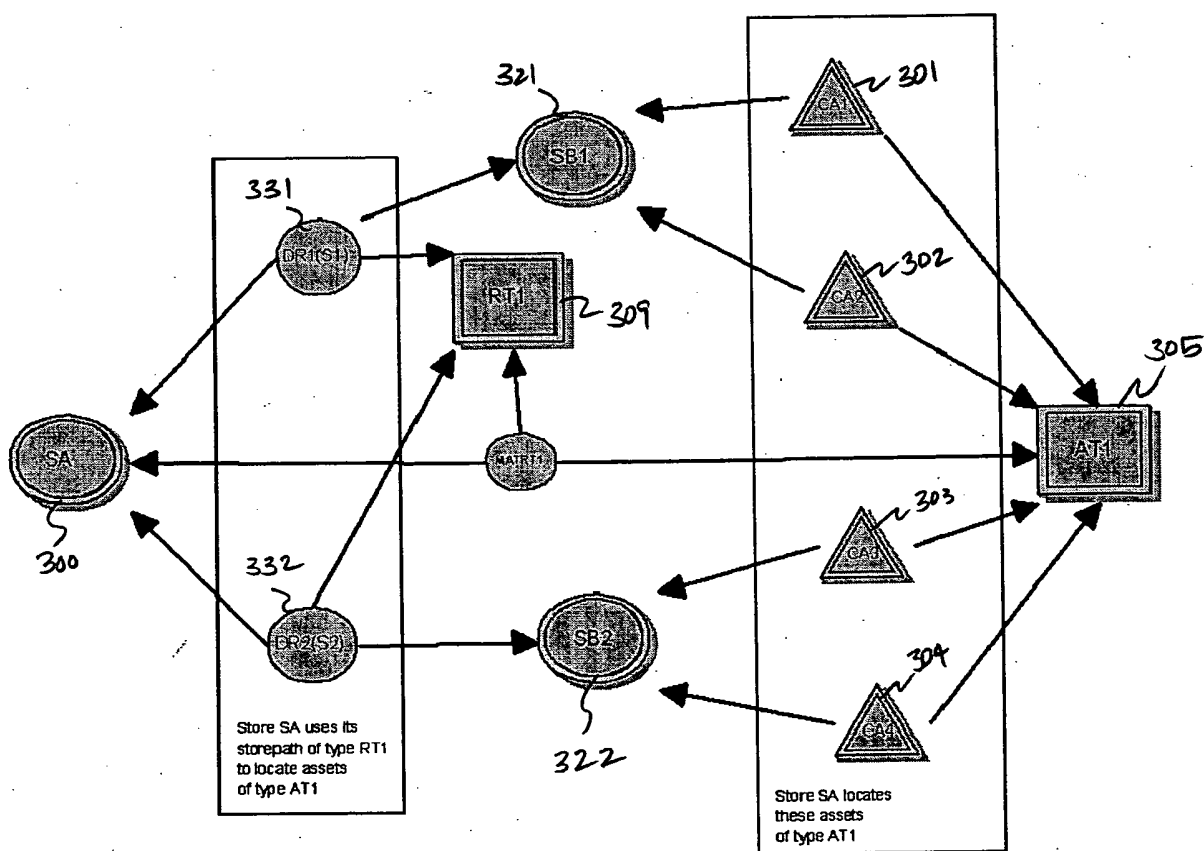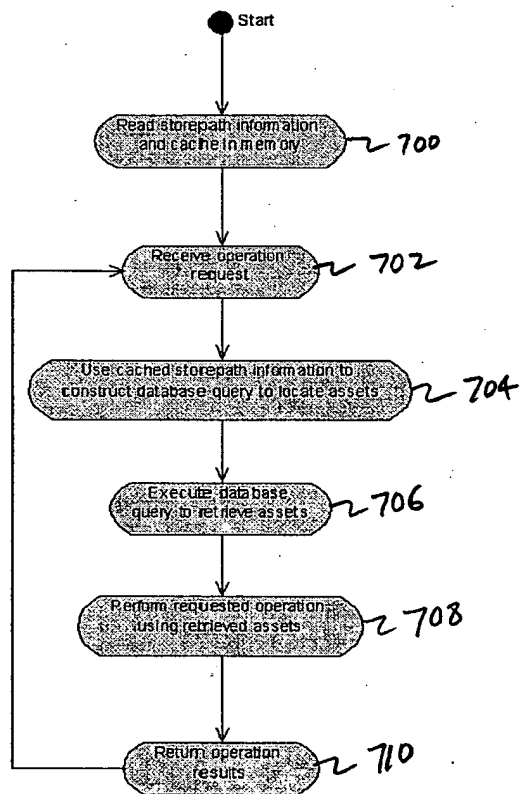
fig. 6

# Application System Operation

● Start

Read storepath information
and cache in memory ~ 700

Receive operation
request ~ 702

Use cached storepath information to
construct database query to locate assets ~ 704

Execute database
query to retrieve assets ~ 706

Perform requested operation
using retrieved assets ~ 708

Return operation
results ~ 710

*fig. 7*